

/// MotionXtra® HG-LE

Built on the same great design and extensive features of the industry-leading HG-100K, the *MotionXtra® HG-LE* delivers the excellence in image quality and the performance reliability that you have come to expect from Redlake.

The *HG-LE* offers mid-range frame rates and resolution at a price that is easily affordable. The camera is fully compatible with the *MotionXtra® HG-100K* and Redlake HG2000, CR2000, and HG-TX cameras.

As a self-contained camera, the *MotionXtra® HG-LE* is easy to set up and ready to use with a simple installation of *MotionCentral™* software and an Ethernet connection. Within minutes, the *HG-LE* identifies itself and presents a live image on your camera control screen. The versatility and flexibility of the *HG-LE* are evidenced by its ease of setup and use, whether in a one-camera system or with hundreds of cameras in a network.

The Ethernet interface allows remote camera control and fast 1000Base-T transfer of uncompressed file formats including TIFF and compact Type-2 Bayer. High-quality JPEGs may be downloaded, providing excellent image quality at a fraction of the file size. AVI files using popular codecs (compressed or uncompressed) may be produced in tandem with any image download.

Designed as a complete imaging system, the *HG-LE* system consists of three major components:

- The high-speed, rugged *HG-LE* Camera
- An optional Hub Sync Unit, which functions both as a High-G Gigabit Ethernet switch and a precision time source providing frame synchronization of multiple cameras to within +/-2.5µs. The camera and Hub can withstand shock up to 100G in any axis.
- *MotionCentral™* software for camera control, image download and viewing is capable of supporting a large number of *HG-LE*, HG-100K and/or HG2000/HG-TX cameras in a dedicated camera network.

An optional tablet style Display Control Unit (DCU) makes the setup of remotely located cameras fast and easy. A small back-up battery is included within the camera to preserve the recording if a power failure occurs after the event.

Whether you choose the HG-100K for maximum performance or the *HG-LE* for value performance, your imaging needs are covered. You can now select from two tiers of products, delineated by performance and pricing, all operating within the same networking environment.

High-Speed, High-Resolution, Extraordinary Performance and Value



S N A P S H O T

- **Redlake-exclusive CMOS sensor, color or monochrome**
- **1500 fps at 752 x 752, up to 100,000 fps at reduced resolutions**
- **Very fast 5µs global electronic shutter eliminates motion blur**
- **Rugged design: withstands up to 100G in any axis**
- **Fast, accurate, reliable camera networking**
- **1000Base-T Ethernet for fast downloads**
- **1 GB memory (2 GB optional)**
- **Compatible with previous Redlake legacy cameras (HG-100K, HG2000/HG-100+/CR/HG-TX)**

A P P L I C A T I O N S

- **Vehicle impact testing (VIT)**
- **Airbag deployment**
- **Component safety testing**
- **Research, design and test**
- **Production and manufacturing**
- **Range, aerospace and ballistics**

///MotionXtra® HG-LE

PERFORMANCE SPECIFICATIONS

Sensor Array	16 channels, 752 x 1128 pixels, CMOS Sensor, Color or Monochrome
Image Resolution	Up to 752 x 1128 at 1000 fps
Dynamic Range	62 dB at sensor and 25°C (77°F) ambient temperature
Recording Rates	Selectable, 25 to 100,000 fps in 5 fps increments; variable frame rate via external source
Shutter	Global Electronic Shutter variable to 5µs
Trigger Frame	Variable position from start to the maximum available frame capacity
Trigger Mode	TTL, 5V-tolerant, user selectable polarity, or switch closure; variable debounce delay
Trigger Stamp	Each frame, selectable reference
Synchronization	All cameras are frame synchronized to a master precision clock when using optional Hub Sync Unit within +/- 2.5 µs
On-Board Storage	1 GB memory storage (2 GB optional)
Camera Size	Dimensions: 5.33"(H) x 4.15"(W) x 11.10" (L) (135 x 105 x 282mm); Weight: 9.9 lbs (4.5kg)
Camera Interface	Camera Network (100/1000Base-T Ethernet); Sync I/O; Trigger In; Power; Strobe Out
Cable Lengths	Camera to Hub: up to 328 ft (100m); Hub to Hub/Control PC: up to 328 ft (100m)
Lens Mount	C-mount, F-mount, and High-G Box-mounts available
Hub Sync Unit Size	Dimensions and Weight: 2.16"(H) x 13"(W) x 13" (L) (55 x 330 x 330mm); Weight: 11 lbs (5Kg)
Hub Sync Unit Interface	Camera/Hub Sync Unit/Control PC Network; Trigger I/O; Power I/O; Legacy Port to connect HG D-Box or HG J-Box for multiple Legacy cameras (HG2000/HG-100+/CR/HG-TX)
Power	Camera: +20 to 50 VDC @ 40W; Hub: +20 to 50 VDC @ 50W
Shock	Camera and Hub: 100G @ 5ms min. any axis, 1000 cycles
Operating Temperature	0°C to +45°C Ambient (32°F to 113°F)
Control Software	MotionCentral™. Windows™ 2000, XP and NT 4.0 SP6 compatible
File Formats	Type-2 Bayer, TIFF, JPEG, AVI; 8-bit mono, 24-bit color
Reticle	Full Screen Crosshair with X,Y Coordinate Display
Options	Tablet Style Display Control Unit (DCU)
Emission/Safety	CE approved, FCC Class B compliant, UL recognized (camera), UL listed (Hub Sync Unit)

Note: Specifications are subject to change.

Sample Frame Rates and Resolutions		
Resolution	Frame Rate	Max. Session Length* (Frames)
752x752	1500	1898
752x564	2000	2530
640x480	2500	3494
512x512	3000	4094
512x320	5000	6550
256 x 256	10,000	16,352
128x128	30,000	65,280

* With 1 GB memory; 2 GB memory also available

Worldwide Sales and Support

Americas
tel: +1-800-462-4307
tel: +1-858-481-8182
sales@redlake.com

Asia Pacific
tel: +65-6293-4758
salesASPAC@redlake.com

Japan
tel: +81-3-5639-2770
salesJapan@redlake.com

Europe, Africa and Middle East
tel: +31-347-324989
salesEurope@redlake.com

HG-LE

